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|-----------|---------|----------------|---------|
| 3,697,748 | 10/1972 | Cohen | 250/288 |
| 4,311,669 | 1/1982 | Spangler | 422/98 |

- Assistant Examiner*—Jack I. Berman

- Attorney, Agent, or Firm**—Bruce L. Lamb; W. G. Christoforo

- [57]

- ## ABSTRACT

- An ion mobility detector in which selectivity and sensitivity is enhanced by converting through surface interactions sample gas or vapor to a form more readily ionized or by converting through surface interactions interferent gas or vapor to a form less readily ionized. To accomplish the conversion, samples may be passed through a catalytically reactive filter prior to injection into the detector reaction region; exposed to a reactive coating placed on the surface of a permeable membrane prior to diffusion therethrough into the reaction region or exposed to a reactive coating placed on the interior walls of the reaction region.

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- 8 Claims, 5 Drawing Figures**

